#### DOCUMENT RESUME

ED 465 249 EC 309 005

AUTHOR Rogers, Kenneth M.; Pumariega, Andres J.; Cuffe, Steven P. TITLE Identification and Referral for Mental Health Services in

Juvenile Detention.

INSTITUTION University of South Florida, Tampa. Research and Training

Center for Children's Mental Health.

SPONS AGENCY National Inst. on Disability and Rehabilitation Research

(ED/OSERS), Washington, DC.

PUB DATE 2001-00-00

NOTE 7p.; In: A System of Care for Children's Mental Health:

Expanding the Research Base. Proceedings of the Annual

Research Conference (14th, Tampa, FL, February 25-28, 2001).

CONTRACT H133B90022 AVAILABLE FROM For full text:

http://www.fmhi.usf.edu/institute/pubs/pdf/cfs/rtc/14thproce

edings/14thchap4.htm.

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.

DESCRIPTORS Adolescent Behavior; Adolescents; Behavior Disorders;

Delinquency; Delinquent Rehabilitation; \*Disability

Identification; Disproportionate Representation; \*Emotional Disturbances; Emotional Problems; \*Juvenile Courts; Juvenile Justice; Mental Disorders; \*Mental Health Programs; \*Racial

Differences; Racial Discrimination; \*Referral

IDENTIFIERS South Carolina

#### ABSTRACT

This report discusses the outcomes of a study that examined the mental health referral patterns of youth referred to a public sector mental health system as the result of a judicial consent decree. The study included two samples of youth ages 13-17 from the entire state of South Carolina. The first group included incarcerated youth recruited from the South Carolina Department of Juvenile Justice (SCDJJ) central detention facility in Columbia (n=120). The second group included youth referred to South Carolina Department of Mental Health (SCDMH) facilities as part of a judicial consent decree (n=120). Data were collected on both samples between January 1997 and December 1997. Findings from the study indicate there is a substantial level of need for mental health services among detained youth. Ninety-six percent of referred youth and 69 percent of incarcerated youth met criteria for a psychiatric disorder. The most common diagnostic category was disruptive disorder for both referred and detained youth. Referred youth were more likely to have affective diagnoses than detained youth; however, they were less likely to have a substance abuse disorder. Consistent with prior studies, African-American youth were referred for mental health services less often than were Caucasian youth. (Contains 16 references.) (CR)

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

his document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

### Identification and Referral for Mental Health Services in Juvenile Detention

#### Introduction

Kenneth M. Rogers Andrés J. Pumariega Steven P. Cuffe

South Carolina is one of a number of states that have been sued in federal court and are currently functioning under a consent decree that mandates mental health treatment for youth with serious emotional disability (SED) The premise of the South Carolina lawsuit is that youth with SED were receiving inadequate mental health services as well as being housed in overcrowded and inadequate facilities (Alexander v. Boyd, 1990/1997). The prevalence of mental illness in juvenile detention facilities is estimated to be as high as 60% (Otto, Greenstein, Johnson, & Friedman, 1992). However, many juvenile correction facilities lack adequate mental health personnel and/or screening procedures for identifying and referring youth with emotional disturbances, and few facilities have the resources in place to address the needs of such youth (Anno, 1984).

The level of emotional and behavioral disturbance in detained youth is similar to levels found in an outpatient community mental health center population (Atkins et al., 1999). The determination of whether a youth will be detained in the juvenile justice system or treated in the mental health system is not always made at the level of psychopathology, but is influenced by demographic variables such as ethnicity, gender, and age (Westendorp, Brink, Roberson, & Ortiz, 1986; Shanok & Lewis, 1977). These same variables, in addition to recidivism and family environment, determine which youth will be referred for mental health services once detained in the justice system (Barton, 1976).

This study examined the mental health referral patterns of youth referred to a public sector mental health system as the result of a judicial consent decree. The purpose of this article is threefold: 1) to compare the prevalence rates of emotional disturbance in youth referred for mental health services as a result of a judicial consent decree with youth incarcerated but not referred for mental health services; 2) to investigate the behavioral symptomatology as measured by the Child Behavior Checklist (CBCL; Achenbach, 1991b) and Youth Self Report (YSR; Achenbach, 1991a) between these groups of youth; and 3) to investigate the impact of sociodemographic, criminal history, and service use on referral for mental health services.

#### Method

This study included two samples of youth ages 13-17 from the entire state of South Carolina. The first group included incarcerated youth recruited from the South Carolina Department of Juvenile Justice (SCDJJ) central detention facility in Columbia (n = 120). These youth were selected from the monthly rosters of the SCDJJ facility. The second group included youth referred to South Carolina Department of Mental Health (SCDMH) facilities as part of a judicial consent decree (n = 120). Data were collected on both samples between January 1997 and December, 1997.

Three instruments were used in this study. The first was the Diagnostic Interview Schedule for Children, version 2.3 (DISC 2.3; Shaffer, Fisher, Dulcan, & Davies, 1996) which assessed major diagnoses found under the Diagnostic and Statistical Manual of the American Psychiatric Association, Third Edition, Revised (DSM-III-R; American Psychiatric Association, 1994). The DSM includes modules for anxiety disorders, mood disorders, psychosis, disruptive disorders, substance abuse disorders, and miscellaneous disorders such as eating disorders, tics, and elimination disorders. The frequency of diagnostic categories, the number of diagnoses, and the number of symptoms that contributed to meeting diagnostic criteria were analyzed. We did not include psychotic symptoms in the total symptom count since the psychosis module was designed as a screen and not a diagnostic module, and many of the symptoms could overlap with symptoms in other modules. As mentioned,

the other instruments utilized were the CBCL and YSR, which were used to assess behavioral and emotional symptoms. We analyzed the total, internalizing, and externalizing T-scores for each instrument.

Bivariate analyses were conducted using the chi-square test of proportions for discrete variables and analysis of variance (ANOVA) for continuous variables for differences between referred and detained youth. The dependent variable was being identified as mentally ill by lawsuit criteria. The independent variables were sociodemographic characteristics (age, gender, and ethnicity) and criminal history (repeat offender, non-violent offender), services use (mental health, foster care), and the presence of an emotional disorder. Furthermore, logistic regression analyses were performed to investigate the effects that each variable had on being identified as mentally ill and referred for further treatment. The model contained all variables that were significant at p < .10 level in bivariate analyses.

#### Results

#### Sample characteristics and level of emotional disturbance

Sociodemographic characteristics, criminal history, lifetime service use, and presence of an emotional disorder are summarized in Table 1. The mean age was 17.1 years (SD = 1.4) for referred youth and 15.6 years (SD = 1.0) for detained youth. The percentage of female detainees in the referred group was substantially greater than the percentage of females in the total sample of detained youth ( $\chi^2 = 5.16$ , p = .023). Although, the majority of youth in both the referred (n = 73, 61%) and detained sample (n = 92, 77%) were African American, more Caucasian youth were identified and referred for mental health services by the lawsuit ( $\chi^2 = 6.09$ , p = .014).

#### Relationship between mental health problems and service use

Seventy-one percent of referred youth (n = 85) had previously used mental health services, while only 52% (n = 62) of detained youth had used any mental health services. The mean number of treatment episodes was 2.1 (SD = 2.3) for lawsuit youth and 1.0 (SD = .98) for detained youth. More than half of referred youth (58%, n = 70) and detained youth (51%, n = 61) had any lifetime use of foster care services. Referred youth had a greater mean number of episodes of foster care placement (M = .90, SD = 1.01) than detained youth (M = 2.0, SD = 1.2).

#### Relationship between clinical need and referral status

Overall, 96% (n = 115) of referred youth and 69% of incarcerated youth (n = 83) had a positive psychiatric diagnosis using the DISC. The most common diagnostic category was disruptive disorders for both referred (n = 51, 43%) and detained (n = 50, 42%) youth. Among youth with a disruptive disorder, attention-deficit hyperactivity disorder (ADHD) was more common ( $\chi^2 = 18.1$ , p = .0001) in referred youth (n = 29, 24%) than in detained youth (n = 2, 2%). The second most common diagnostic category was anxiety disorders for both lawsuit (n = 66, 55%) and detained (n = 53, 44%) youth. Referred youth were more likely to have affective diagnoses than detained youth; however, they were less likely to have a substance abuse disorder. The psychosis screen, which is a screen that is often indicative of a psychiatric disturbance but not necessarily psychosis, was positive in both groups, but significantly higher in the referred group.

Comorbidity was common in this population. Detained youth had a mean number of 2.4 (SD=2.7) diagnoses while referred youth had 4.4 (SD=3.3) diagnoses. The mean CBCL Total T-score for both detained and referred youth were in the clinical range but did not differ significantly. Sixty-six percent (n=79) of referred youth and 29% (n=35) of incarcerated youth had scores in the clinical range when using a Total T-score of 70 (2 SD above the mean). However, when using a Total T-score of 60 (1 SD above the mean), 88% (n=106) of referred youth and 59% (n=71) of detained youth were in clinical range. The mean YSR Total T-score was elevated in the lawsuit youth and was significantly higher than in detained youth (F(2,239)=9.77, p=.0021).

Table 1 Sociodemographic Characteristics, Criminal History, Lifetime Service Use and Emotional Disorders of Detained and Lawsuit Youth: January 1997-December 1997

	Referred Youth			Non-Referred Youth		
	M (SD)	%	N	M (SD)	%	N
Age (years)***	17.1 (1.4)			15.6 (1.0)		
Female*		16	19		7	8
Ethnicity						
African-American*		61	73		77	92
Caucasian		33	40		23	28
Other*		6	7		. 0	0
Criminal history						
Repeat offenders**		37	44		57	68
Nonviolent offenders**		73	88		90	108
Lifetime Service Use						
Mental Health*		71	85		52	62
Foster Care +		58	70		51	61
Emotional Disorder						
Anxiety +		55	66		34	41
Affective*		53	64		47	56
Disruptive		43	51		42	50
Psychosis Screen**		63	76		44	53
Substance Abuse***		8	10		21	25
Miscellaneous*		2	2		9	11

Percentages rounded to next whole number.  $+ p \le .10$ ,  $*p \le .05$ ;  $**p \le .01$ ;  $***p \le .001$ .

Anxiety: Includes obsessive compulsive disorder, panic disorder, separation anxiety disorder, simple phobia, social phobia, overanxious disorder, and generalized anxiety disorder.

Mood: Includes major depressive disorder, dysthymia, and bipolar disorder.

Psychosis: includes positive psychosis screen.

Disruptive: includes conduct disorder, oppositional defiant disorder, and attention deficit disorder.

Substance Abuse: includes alcohol, marijuana, and other Illegal drug abuse and/or dependence.

Miscellaneous: includes eating disorders, movement disorders, and enuresis/encopresis.

Note: One way ANOVA's performed with Bonferroni corrections for repeated measures with df=1 for between group comparisons; for chi square analyses df=1.

Table 2 **Prevalence of Diagnoses and Clinically Significant Disturbance** in Incarcerated and Lawsuit Youth: January 1997-December 1997

Measure of Emotional Disturbance	Referred Youth (n=120)		Non-Referred Youth (n=120)	
	%	n	%	n
Positive Diagnosis ****	96	115	69	83
Positive CBCL b ***	66	79	29	35
Positive YSR c	56	67	17	20
Positive Diagnosis and CBCL ***	63	76	25	30

Percentages rounded to next whole number. \* $p \le .05$ ; \*\* $p \le .01$ ; \*\*\* $p \le .001$ .

any positive DISC diagnosis
CBCL Total T-score ≥ 70

<sup>°</sup> YSR Total T-score ≥ 70

Table 3
Diagnosis and Symptom Comparison in Referred and Non-Referred Youth:
January 1997-December 1997

Measure of Emotional Disturbance		erred Youth 120)	Non-Referred Youth (n=120)	
	М	SD	М	SD
Number of DISC Diagnoses *	4.4	3.3	2.4	2.7
Number of DISC Symptoms *	46.6	32.3	30.4	23.0
CBCL Total T+	66.9	12.3	63.1	11.0
CBCL Internal T *	63.6	13.3	55.6	11.4
CBCL External T	67.3	13.0	65.4	10.9
YSR Total T **	64.1	12.0	57.9	12.1
YSR Internal T **	61.8	11.9	55.3	11.8
YSR External T *	64.9	11.7	60.1	12.9

 $<sup>+</sup>p \le .10, *p \le .05, **p \le .01,$ 

#### Discussion

Findings from this study suggest that there is a substantial level of need for mental health services among detained youth. Ninety-six percent of referred youth and 69% of incarcerated youth met criteria for a psychiatric disorder. The level of psychopathology in the referred population is greater than the level of reported psychopathology in youth in a state hospital (Atkins et al., 1999), and the level of psychopathology in the detained population is consistent with the higher end of estimates from previous studies (Otto et al., 1992). The low rate of substance abuse in this population was surprising in light of prior studies which demonstrated levels of substance abuse that were substantially higher (Elliot, Huizinga and Menard, 1989; McManus, Alessi, Grapentime, & Bickman, 1994). Consistent with prior studies (Lewis, Shanok, Cohen, Kligfeld, & Frisone, 1980; Kaplan and Busner, 1992; Cohen, et al., 1990; Pumariega, Atkins, Rogers, & Montgomery, 1999), African-American youth were referred for mental health services less often than were Caucasian youth.

#### Clinical Implications

These findings suggest that many youth in juvenile detention facilities suffer from significant psychiatric impairment and may be identified only when there is a legal requirement to do so. A clinical assessment is merited when a youth has a prior history of mental health involvement. During such an assessment, evaluation of emotional/behavioral problems as well as substance abuse should be conducted. Future research should further explore the clinical needs of youth who are detained in very restrictive settings such as detention facilities. Case mix variation including criminal history should be taken into account when examining the level of mental health service need in this population. Such information is needed to guide service delivery including aftercare services for youth released from secure detention facilities.

#### References

- Achenbach, T. M. (1991a). *Manual for the Child Behavior Checklist/4-18 and 1991 Profile*. Burlington, Vermont: University of Vermont Department of Psychiatry.
- Achenbach, T. M. (1991b). *Manual for the Youth Self Report and 1991 Profile*. Burlington Vermont: University of Vermont Department of Psychiatry.
- Alexander. v. Boyd. (1990/1997). United States Court of Appeals for the Fourth Circuit. Nos 96-1950(L) (CA-90-3062-3-17). Retrieved: http://www.law.emory.edu/4circuit/may97/961950.p.html
- American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders, 3rd edition, revised (DSM-III-R). Washington, DC: American Psychiatric Association.
- Anno, B. (1984). The availability of health services for juvenile offenders: Preliminary results of a national survey. *Journal of Prison and Jail Health*, 4, 77-90.
- Atkins, D., Pumariega, A., Rogers, K., Montgomery, L., Nybro, C., Jeffers, G., & Sease, F. (1999). Mental health and incarcerated youth I: Prevalence and nature of psychopathology. *Journal of Child and Family Studies*, 8, 193-204.
- Barton, W. (1976). Discretionary decision-making in juvenile justice. Crime and Delinquency, 22, 470-480.
- Cohen, R., Parmelee, D., Irwin, L., Weisz, J., Howard, P., Purcell, P., & Best, A. (1990). Characteristics of children and adolescents in a psychiatric hospital and a corrections facility. *Journal of the American Academy of Child and Adolescent Psychiatry*, 29, 909-913.
- Elliott, D., Huizinga, D., & Menard, S. (1989). Multiple problem youth: Delinquency, substance abuse and mental health. New York: Springer Verlag.
- Lewis, D., Shanok, S., Cohen, R., Kligfeld, M., & Frisone, G. (1980). Race bias in the diagnosis and disposition of violent adolescents. *American Journal of Psychiatry*, 137, 1211-1216.
- McManus, M., Alessi, N. E., Grapentime, W. L., & Brickman, A. (1984). Psychiatric disturbance in serious delinquents. *Journal of the American Academy of Child and Adolescent Psychiatry*, 23, 602-615.
- Otto, R., Greenstein, J., Johnson, M., & Friedman, R. (1992). Prevalence of mental disorders among youth in the juvenile justice system. Responding to the mental health needs of youth in the juvenile justice system. Seattle: The National Coalition for the Mentally III in the Criminal Justice System.
- Pumariega, A. J., Atkins, D. L., Rogers, K. M., Montgomery, L., et al. (1999). Mental health and incarcerated youth: Prevalence and nature of psychopathology *Journal of Child and Family Studies*, 8, 205-215.
- Shaffer, D., Fisher, P., Dulcan, M.K., & Davies, M. (1996). The NIMH Diagnostic Interview Schedule for Children, Version 2.3 (DISC-2.3): Description, acceptability, prevalence rates, and performance in the MECA study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 35, 865-877.
- Shanok, S., & Lewis, D. (1977). Juvenile court versus child guidance referral: Psychosocial and parental factors. *American Journal of Psychiatry*, 134, 1130-1133
- Westendorp, F., Brink, K., Roberson, M., & Ortiz, I. (1986). Variables which differentiate placement of adolescents into juvenile justice or mental health systems. *Adolescence*, 21, 23-37.

Rogers, Pumariega & Cuffe

#### **CONTRIBUTING AUTHORS**

#### Kenneth M. Rogers, M.D., M.S.H.S.

William S. Hall Psychiatric Institute, PO Box 202-1800 Colonial Drive, Columbia, SC 29202; 803-898-1600, Fax: 803-898-1596; E-mail: kmr28@wshpi.dmh.state.sc.us

#### Andrés J. Pumariega, M.D.

East Tennesee State University, James H. Quillen College of Medicine, Department of Psychiatry and Behavioral Sciences, Box 70567, Johnson City, TN 37614-0567; 423-439-7796, Fax: 423-439-7710; E-mail: pumarieg@etsu.edu

#### Steven P. Cuffe, M.D.

William S. Hall Psychiatric Institute, PO Box 202-1800 Colonial Drive, Columbia, SC 29202; 803-898-1593, Fax: 803-898-1596; E-mail: spc45@wshpi.dmh.state.sc.us

160 - Research and Training Center for Children's Mental Health - Tampa, FL - 2002



# U.S. Department of Education Office of Educational Research and Improvement (OERI) National Library of Education (NLE) Educational Resources Information Center (ERIC)



## **NOTICE**

## **REPRODUCTION BASIS**

This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.
This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").